A Discussion on the Role of Teachers and Technology Supported Learning in Education

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Abstract— From the time immemorial we have seen a rapid change in the fundamental aspects of the educational landscape. These changes include the different means and sources of learning in education. Here we see a progressive shift from self – led learning to Artificial intelligence –led learning in education considering the need of the society.

Index Terms— Self – learning, technology, Artificial Intelligence

I. INTRODUCTION

Education is a journey from womb to tomb. This journey is very important for everyone to move from ignorance to knowledge, unknown to known and untruth to truth. The journey is important in the life of every human being because ignorance does not make a man human being. Only when a person reaches this destination he or she becomes an educated person or a real human being. During this journey one faces a lot of challenges. This challenges would be in various levels like the financial challenges, personal challenges social challenges and so on. But when one is determined to overcome these challenges his journey becomes easier to acquire the right education. During the Vedic time education was either verbal self-study or meditation. That helped man to reach his destination.

II. SELF – LED LEARNING IN EDUCATION

From the time immemorial education was mostly human led. The origin of settled life gave way for the development of civilization. A systematic education emerged from this civilization. At that time the focus of education was depending on the need of the society. Certain needs could be mentioned as learning about agriculture, trade, law, civic society, and religion. There were many experts in various fields to help each other. Education was focused only in these streams.

This gave way for self – led learning, critical thinking and creativity. Every student had to depend on human-led education. At this juncture self – led learning was not only an opportunity but sometimes it was the only possibility.

When we are passionate to learn something, nothing can stop us from learning something new. Most of the time either it is because of our need or a desire to do something. Learners are free to set their own learning objectives and define what is worth learning. It can take place both inside and outside a formal educational system. Inside the formal educational system teachers become only a facilitator. In fact, they are the transmitters of knowledge. This happens in a formal educational system (Loeng, 2020)[1].

2.1 Advantages of self – led learning in education

Every child is free to think and dream before it enters in to formal education in the school. Their mind will be wandering. Normally a tree collects its food from the nearby atmosphere. Hence every human also can construct knowledge from his own surrounding. Knowledge is available around us. There are various opportunities to acquire this knowledge. It depends on us to take the source and construct our knowledge. We also know that the education of the heart is the art of education. The various opportunities and sources available should be used to educate human heart.

In the self-directed learning the learner has to take initiative in their learning process. They have to identify their needs of learning, learning goals, learning strategies, and evaluating learning outcomes. There will not be any assistance from anyone in this process. Self- led learning in education does not always mean that it is individualized learning but it takes place in isolation. Sometimes learners also can engage in group-learning setting. In the recent years

self-led learning in education received more attention. There are many sources available to facilitate self - led learning in education such as, related books, articles, monographs, symposia, practices and so on. These include resources support groups, open university programs, electronic networking and computer assisted learning.

2.2 Disadvantages of self – led learning in education

In self- led learning in education the learner has very less avenues. Here the learner takes initiative on his own learning. The learning process falls on the learner. The learner has no access to any other external sources such as a trainer. Learner also lack here the support and resources, teachers and other educational resources. In self-led learning in education the learner takes the responsibility to design, implement and evaluate education. The structured education helps the learner to stay focused and motivated. In this regard the learner will have no time limit and effort. Even if the learning goals are not achieved there is no assessment for the learner. The self-assessment alone cannot determine the learning goals. Here no place for social interaction and collaboration with other learners. Hence the learner is isolated and disconnected from the learning world (Shwetha, 2023)[2].

Brookfield in one of his articles has criticised self-directed learning for ignoring social context by focusing on the individual, isolated learner and stresses the social construction of knowledge and the social context of learning (Brookfield, 1985)[3]. According to Garrison the individual does not construct meaning in isolation: to take responsibility of your own learning does not necessarily mean to make decisions in isolation (Garrison, 1992)[4]. In self-learning led education one has to take complete responsibility for oneself. In this case one of the challenges is that we are not sufficiently self-motivated. This negative mind-set holds us back. It demands a lot of hard work for oneself. If this does not apply, then no learning takes place.

III. TEACHER LED LEARNING IN EDUCATION

To know teacher led education we need to know the ancient education. The success and the achievement of

effective education depends on the nature of the relationship that exists between the teacher and the student. Teacher plays an important role in it. If we go back to the period of Atharva Veda, the Guru or the teacher was the spiritual father. At this period, it was the teacher who lead the student from the darkness of ignorance to the light of knowledge. It is said that the lamp of learning is concealed under a cover, the teacher removes it and let out the light. The spiritual salvation also was entirely attributed and depended upon the proper guidance of a teacher. During this period, teachers were generally monks who had renounced the world and were in no need of salaries. This very nature of a teacher helped them to focus on education. But there were certain challenges that every teacher had to face. Caste system, economical condition of the students, religious interference in the education and so on were very much common. However, the teacher's profession had a very high code of honour in the ancient time.

There was a progressive development in education from ancient Vedic education to modern English education. The modern education made a steady progress from the arrival of British in India. There were many commission appointed to bring changes in the ancient education. Lord Macaulay finally introduced English education in India. With this a new educated generation was born. Many more educational institutions also were increased. The aim of the education changed to make people self-dependent. Needs of the society is considered. Accordingly, adequate training was given to teachers. Teachers played a vital role in the formation and implementation of educational programmes. Educational policies later stabilized the role of a teacher in education. Any educational institutions are mainly concerned about transmitting knowledge from teachers to students. In the modern era students become co-creators of the classroom in the learning process. We need to create between teacher and student to achieve the expected goal (Robinson, 2016)[5].

IV. TECHNOLOGY LED LEARNING IN EDUCATION

It is an important topic to discuss regarding the role of a teacher in the whole process of teaching and

learning. In most of the cases a teacher is reduced in to merely an informer and facilitator. It is due to the growing use of technology in education. We know well the traditional function of a teacher is to be a guide, mentor, shaping the lives of students and building their character. Most of the responsibilities will be taken over by technology. It has greatly transformed the dynamics of teaching and learning. Students also are shifted from their passive role to active role. It is because of the technology led education. Students are not merely recipients of information given by the teacher alone. With the advent of technology there is a visible paradigm shift in the teaching and learning process.

Technology is used in education in various ways. First of all, it is used as a part of curriculum. According to the new education policy even artificial intelligence has become part of curriculum. This helps students to know the different avenues of technology led education. Technology is used to deliver the teaching contents. It becomes more effective in teaching and learning process. In this context students are more active participants in their learning. There is a shift from boredom to active participation while using technology in teaching content. Technology can be used a teaching aid. It is depending on the creativity and innovative use of teacher in their teaching process. It avoids the monotonous method of teaching. Technology is used as a tool to enrich ones learning experience. Technology in education gives new knowledge and learning experience. It also gives freedom to the students.

V. ARTIFICIAL INTELLIGENCE LED LEARNING IN EDUCATION

Post-modern teaching and learning trend is with artificial intelligence. Artificial intelligence has silently entered in to every aspect of teaching and learning process. Artificial intelligence is used extensively in education, particularly by education institutions in different forms. There are many application and tools driven by artificial intelligence technologies (Chen et all, 2020)[6]. Through these means there is an increase in the educational experience of the students. Artificial intelligence enhanced technology is already in the classroom.

Artificial intelligence enhanced digital technology is being developed rapidly for customized and personalized learning. There are certain applications of artificial intelligence in education like intelligence tutoring system, dialogue based tutoring system, exploratory learning system, language learning and exploratory learning environment. At present Chatbots are developed as artificial intelligence educational apps. This is already implemented in the classrooms especially where students use iPads or laptops. It helps them to understand specific topics such as maths or reading comprehension. Artificial intelligence led education is also helpful in administrative works such as grading papers, writing essays making recommendations to students about what they should study next, providing insights about students learning styles and giving feedback for students and so on.

CONCLUSION

The world is facing a learning crisis. It is only education can build human being. There are a lot of uncertainty about learning. Some time back it was enough for schools and teachers to prepare students with basic reading and writing skills. Now the classroom alone is not the means of any learning. Technology also is providing support to teachers, students and the learning process more broadly. Learning is personalized to meet the needs and strengths of each child. With the arrival of the modern education system there is a major shift in the education system. Just classroom learning alone does not meet the needs of the society. Hence students are venturing in to different avenues of learning.

REFERENCES

[1] Loeng, S. (2020). Self-directed learning: a core concept in adult education. Hindawi Education Research International. Vol.2020, pp. 12.

[2] Shweta, S. (2023). Self-directed learning advantages and disadvantages. Number Dyslexia. Punjab. https://numberdyslexia.com

[3] Bookfield, S. (1985). Self-directed learning: a conceptual and methodological exploration. Google Scholar. Vol.17. No.1.

[4] Garrison, D. (1992). Critical thinking and self-directed learning in adult education: an analysis

of responsibility and control issues. Adult Education Quarterly. Vol.42. No.3, pp.136-148.

[5] Robinson, S., Neergaard, H., Tanggaard, L., & Krueger, N. (2016). New horizons in entrepreneurship education: from teacher-led to student-cantered learning. Emerald Group Publishing Limited. Vol.58. pp. 661-683.

[6] Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: a review. IEEE Access Journal. Vol.8.